What is Claimed:

1. A method of measuring platelet aggregation in a blood sample comprising:

obtaining a blood sample from an individual;

exposing the blood sample immediately to an anticoagulant;

treating the anticoagulated blood sample with an agonist of platelet aggregation; and

analyzing the treated blood sample with an automated hematology analyzer to determine the degree of platelet aggregation in the treated blood sample, wherein said analyzing is carried out prior to the occurrence of substantial disaggregation.

2. The method according to claim 1 wherein the anticoagulant is D-Phe-Pro-Arg chloromethyl ketone dihydrochloride.

3. The method according to claim 1 wherein the automated hematology analyzer is an electrical impedance-type hematology analyzer.

4. The method according to claim 1 further comprising:

mixing the treated blood sample prior to said analyzing.

5. The method according to claim 4 wherein said mixing is carried out by inversion.

6. The method according to claim 1 wherein the platelet aggregation determined during said analyzing correlates to platelet aggregation as measured by LTA $r^2 \geq 0.85$.

7. The method according to claim 1 wherein said analyzing is carried out within less than about 5 minutes after said treating.

8. The method according to claim 1 wherein said analyzing is carried out within less than about 3 minutes after said treating.

9. The method according to claim 1 wherein said analyzing is carried out substantially immediately after said treating.

10. A method of determining or monitoring the efficacy of anti-platelet therapy comprising:

obtaining a blood sample from an individual treated with an anti-platelet therapy;

exposing the blood sample immediately to an anticoagulant;

treating the anticoagulated blood sample with an agonist of platelet aggregation; and

analyzing the treated blood sample with an automated hematology analyzer to determine the level of platelet aggregation inhibition in the treated blood sample,

wherein platelet count at or above a baseline level indicates that the anti-platelet therapy is less than effective and

wherein said analyzing is carried out prior to the occurrence of substantial disaggregation.

11. The method according to claim 10 wherein the anti-platelet therapy comprises GPIIb-IIIa antagonist therapy.

12. The method according to claim 11 wherein the GPIIb-IIIa antagonist is abciximab, eptifibatide, or tirofiban.

13. The method according to claim 10 wherein the anticoagulant is D-Phe-Pro-Arg chloromethyl ketone dihydrochloride.

14. The method according to claim 10 further comprising:

modifying the anti-platelet therapy administered to the individual and

repeating said obtaining, said exposing, said treating, and said analyzing,

wherein platelet count at or above either the baseline level or the previously determined level indicates that the modified anti-platelet therapy is ineffective.

15. The method according to claim 10 wherein the automated hematology analyzer is an electrical impedance-type hematology analyzer.

16. The method according to claim 10 further comprising:

mixing the anticoagulated blood sample prior to said analyzing.

17. The method according to claim 10 wherein the baseline level is determined by performing said obtaining, said exposing, and said analyzing either prior to or during administration of anti-platelet therapy to an individual.

18. The method according to claim 17 wherein the anticoagulant used in said determining the baseline level is the same anticoagulant used in said exposing.

19. The method according to claim 18 wherein the anticoagulant is D-Phe-Pro-Arg chloromethyl ketone dihydrochloride.

20. The method according to claim 10 wherein said analyzing is carried out substantially immediately after said treating.

21. The method according to claim 10 wherein said analyzing is carried out within about 5 minutes following said treating.

22. The method according to claim 10 wherein said analyzing is carried out within about 3 minutes following said treating.

23. A method of detecting the presence of platelet micro-aggregates in a blood sample comprising:

obtaining a blood sample from an individual;

exposing the blood sample immediately to an anticoagulant;

treating the anticoagulated blood sample with an agonist of platelet aggregation; and

analyzing the treated blood sample with an automated hematology analyzer,

wherein an MPV substantially greater than measured at baseline indicates the presence of platelet aggregates in the test sample and indicative of incomplete inhibition of platelet aggregation.

24. The method according to claim 23 wherein the anticoagulant is D-Phe-Pro-Arg chloromethyl ketone dihydrochloride or sodium-citrate.

25. The method according to claim 23 wherein the automated hematology analyzer is an ICHOR hematology analyzer.

26. The method according to claim 23 further comprising:

mixing the treated blood sample prior to said analyzing.

27. The method according to claim 26 wherein said mixing is carried out by inversion.

28. The method according to claim 23 wherein said analyzing is carried out within about 5 minutes following said treating.

29. The method according to claim 23 wherein said analyzing is carried out within about 3 minutes following said treating.